

PROCEEDINGS OF THE NEW YORK ENTOMOLOGICAL SOCIETY

MEETING OF NOVEMBER 18, 1924

A regular meeting of the New York Entomological Society was held at 8 P. M., on November 18, 1924, in the American Museum of Natural History, Vice-president Dr. Frank E. Lutz in the chair, with 16 members and six visitors present.

Mr. Herbert Eberle, 1592 East 12th Street, Brooklyn, was elected a member of the Society.

Mr. Roland Jackson Hunter, 636 High Street, Newark, was proposed.

Dr. W. J. Holland spoke of the early days of entomology in this country and described many of the entomologists he had known. Born in the island of Jamaica in 1848, the son of a missionary there, his earliest associations were with Philip Gosse and C. B. Adams, who visited his father and may have rocked his cradle when an infant. Later his mother encouraged his painting of butterflies, but during his college years at Amherst no encouragement was had. As pastor of a church in Pittsburgh, and especially by contact with the young missionaries trained there, the opportunity came for studying entomology. Through the assistance of Andrew Carnegie the W. H. Edwards collection was acquired. The Butterfly Book in 1898, the Moth Book in 1903, and many other publications followed. In the course of those years at the close of the last century Dr. Holland had many entomological acquaintances, Henry Edwards, Neumogen, Smith, Riley, Strecker, in this country; Staudinger, Hampson, Butler, Oberthur and others abroad, of whom he told amusing and interesting anecdotes. He told how Henry Ulke said to him "why shouldn't a man be young who studies entomology" and how Prof. Wm. T. Forbes's father blamed the Butterfly Book for spoiling the legal career he had mapped out for his son. He rejoiced in the growing importance of the science and told how he had heard a passerby describe the "State Bugger."

Mr. Leng presented Dr. Forbes's paper on the Wing Folding of Coleoptera, in which it is pointed out that the various patterns may be grouped into divisions which agree with those previously established upon other characters, viz.: Adephaga and Polyphaga primarily, and secondarily four groups of the Polyphaga. Going further it is pointed out that the relationship of some hitherto doubtfully placed forms may be determined by studying the pattern of wing folding.

Dr. Forbes exhibited by drawings he had made and by blackboard illustration the characters of each of the divisions, and discussed some of the more interesting abnormal forms. He answered a number of questions,

especially as to the mechanism of folding which he said was due to relaxation of the muscles.

Mr. Bird, Mr. Hunter, and Dr. Holland took part in the discussion that followed.

MEETING OF DECEMBER 2, 1924

A regular meeting of the New York Entomological Society was held at 8 P. M., on December 2, 1924, in the American Museum of Natural History, President Harry B. Weiss in the chair, with 21 members and about 12 visitors present.

Mr. Roland J. Hunter, 636 High Street, Newark, was elected a member of the Society.

Mr. Andrew R. Jansen, 428 West 204th Street, and Mr. Henry Silver, 887 Crotona Park North, were proposed for membership by Mr. Mutchler.

Dr. Leonard announced that up to July 1 he would be in Ithaca editing a New York State List of Insects for which publication was assured by the College of Agriculture, Cornell University. Clerical assistance would also be furnished by the college but active cooperation in preparing the list by specialists was needed.

Dr. Sturtevant spoke on "Some Things We have Learned from a Fly about Heredity," using living specimens of *Drosophila melanogaster* and other species of *Drosophila* as illustrations. In simple language he described the fourteen years of experimental work conducted by Dr. Morgan and himself at Columbia University during which time 20,000,000 specimens had been examined under the microscope. *Drosophila* had been the main subject of investigation because its breeding every two weeks, the ease with which each brood could be studied in ½-pint milk bottles, and raised on fermenting banana (of which about three bunches a week were used) made it most suitable. As the result of breeding from the sports that arose about 400 types of variation had been found, some presenting very slight differences, others differences of remarkable character. Four of such were shown, one with white eyes which had bred true for 200 generations, one with vestigial wings, one with curled wings, and one with black wings, these being departures from the wild type, brownish in color, with bright red eyes and wings of ordinary type. All breed true.

Dr. Sturtevant then proceeded to show how heredity depends on units of the chromosomes of which a definite number are found in each cell nucleus. This number for *Drosophila melanogaster* is four; it varies in other species of *Drosophila* and other animals, and is forty-eight in man. The units also vary in form, and those that are rod-like also vary with the sex. At the request of Dr. Lutz the differences between the chromosomes of male and female were explained in detail as well as the combination that determined the sex of the offspring.

Dr. Sturtevant's remarks were discussed by Messrs. Bird, Barber, Lutz and Davis, bringing out that the speaker regarded the laboratory products as sports or mutations.

Mr. Davis exhibited typical *Cicada bonhoti* from New Providence, Bahamas, collected by Mr. Olsen and some allied forms from Andros, Cuba and Florida.

Mr. Jones spoke briefly of his visits to European museums dwelling upon the kindness and generosity of the curators he had met.

MEETING OF DECEMBER 16, 1924

A regular meeting of the New York Entomological Society was held at 8 P. M., on December 16, 1924, in the American Museum of Natural History, President Harry B. Weiss in the chair, with 15 members and four visitors present.

Messrs. Jansen and Silver, proposed at the previous meeting, were elected members of the Society.

Mr. Leng exhibited Bulletin 319 of Maine Agricultural Experiment Station on the Blueberry Beetle and some of its relatives.

The president appointed as nominating committee Messrs. Sherman, Woodruff and Sturtevant.

Mr. Davis spoke of "The South American *Cicada tibicen* with other studies in Cicada." He showed Meriam's work in which *tibicen* was illustrated from Surinam and the errors of Linné and others by which the locality Carolina has been misapplied. He quoted Garman as having early detected the error and emphasized the fact that *tibicen* does not occur in the United States. Six boxes of specimens illustrated the thoroughness of his studies in *Cicada*. His remarks will be printed in full.

Mr. Watson exhibited four rare and beautiful Lepidoptera donated to the Museum by Mr. Frank Johnson, three being Morphos of the *hecuba* section and one a moth, *Coscinocera hercules* from New Guinea, attaining nearly ten inches in length.

Mr. Mutchler exhibited the museum collection of the genus *Popillia* and its parasites, being a part of the Japanese Beetle exhibit in preparation.